

REMARKS

Claims 1 and 3 have been amended to improve form and new claim 20 has been added. Claims 1-20 are now pending in this application.

Claim 1 has been rejected under 35 U.S.C. § 112, second paragraph as being indefinite. In particular, the Office Action states that the term “said specific OAM cell handler” at line 9 lacks proper antecedent basis (Office Action – page 2). Claim 1 has been amended to replace the term “said specific OAM cell handler” with “said first OAM cell handler.” Accordingly, withdrawal of the rejection of claim 1 under 35 U.S.C. § 112, second paragraph is respectfully requested.

Claims 1, 3-7 and 9-19 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Nagata et al. (U.S. Patent No. 6,269,083; hereinafter Nagata). The rejection is respectfully traversed.

Claim 1 recites a plurality of OAM cell handlers (OCHs), a plurality of virtual path handlers (VPHs), a plurality of virtual channel handlers (VCHs) and a plurality of trunks. The Office Action states that OAM cell controller 37 in Fig. 5 is equivalent to the claimed plurality of OCHs, exchange B (element 12) in Fig. 2 is equivalent to the claimed plurality of VPHs, exchange C (element 13) in Fig. 2 is equivalent to the claimed plurality of VCHs and points to col. 6, lines 36-46 as disclosing trunks (Office Action – page 3). The applicant assumes that exchange D (element 14) in Fig. 2 is alleged to be equivalent to the claimed trunks. The applicant respectfully disagrees.

Nagata discloses that elements 12, 13 and 14 correspond to exchanges or network elements in an ATM network (Nagata – col. 6, lines 22-38). Nagata does not disclose or suggest that exchange 12 is equivalent to a plurality of path handlers, that exchange 13 is

equivalent to a plurality of virtual channel handlers or that exchange 14 is equivalent to a plurality of trunks, as alleged in the Office Action. In contrast, Nagata merely discloses that exchanges 12-14 are network elements contained in an ATM network that are located between exchange 11 and subscriber terminal 16.

Claim 1 also recites a control unit configured to issue an OAM (operation and maintenance) cell send instruction to a first one of said plurality of OAM cell handlers, control said first OAM cell handler to carry out a loop back control test to at least one of said virtual path handlers, at least one of said virtual channel handlers, and at least one of said trunks, which are associated with said first OAM cell handler in response to said OAM cell send instruction, and when said first OAM cell handler sends out an OAM cell in response to said OAM cell send instruction, determine a fault position based on returning or non-returning of the OAM cell to said first OAM cell handler. Since Nagata does not disclose the claimed plurality of VPHs, plurality of VCHs and plurality of trunks, Nagata cannot further disclose a control unit configured to issue an OAM cell handler and control the first OAM cell handler to carry out a loopback test to at least one of the VPHs, at least one of said VCHs and at least one of said trunks, which are associated with the first OAM cell handler, as required by claim 1.

In other words, the testing performed by Nagata is directed to testing a path in an ATM network to a subscriber terminal. Claim 1, in contrast, recites that the control unit is configured to test at least one of the VPHs, at least one of the VCHs and at least one of the trunks. That is, the testing performed in claim 1 is directed to testing elements or components of an ATM switching system, not testing a path to an end subscriber terminal, such as subscriber terminal 16 in Nagata.

For at least these reasons, Nagata does not disclose or suggest each of the features of claim 1. Accordingly, withdrawal of the rejection and allowance of claim 1 are respectfully requested.

Claims 3-6 are dependent on claim 1 and are believed to be allowable for at least the reasons claim 1 is allowable. In addition, these claims recite additional features not disclosed or suggest by Nagata.

For example, claim 3 recites that the plurality of OAM cell handlers, the plurality of virtual path handlers, the plurality of virtual channel handlers, the plurality of trunks and the control unit are contained in an ATM switching apparatus. The Office Action states that Nagata discloses this feature and points to Fig. 5, items 31 and 34 for support (Office Action – page 3). The applicant respectfully disagrees.

Fig. 5 of Nagata illustrates the structure of each of exchanges 12-14 (Nagata – col. 9, lines 4-5). In Fig. 5, element 31 is an ATM exchange function block and element 34 is an ATM switch unit. The elements alleged to be equivalent to the claimed VPHs, VCHs and trunks are exchanges 12, 13 and 14 in Fig. 2. These exchanges 12-14 of Nagata are not included in the same ATM switching apparatus, as required by claim 3. In contrast, exchanges 12-14 are separate network elements used to route data in an ATM network.

For at least this additional reason, withdrawal of the rejection and allowance of claim 3 are respectfully requested.

Claim 7 recites a route monitor control method that includes carrying out a loop back control test to at least one of a plurality of path handlers, at least one of a plurality of channel handlers, and a trunk, which are associated with said specific OAM cell handler, in response to said OAM cell send instruction. Similar to the discussion above with

respect to claim 1, Nagata discloses carrying out a loopback cell from one exchange to a number of exchanges that define a connection to a subscriber terminal. Nagata does not disclose or suggest carrying out a loopback control test to at least one of a plurality of path handlers, at least one of a plurality of channel handlers, and a trunk, which are associated with said specific OAM cell handler, in response to said OAM cell send instruction, as required by claim 7.

For at least these reasons, Nagata does not disclose or suggest each of the features of claim 7. Accordingly, withdrawal of the rejection and allowance of claim 7 are respectfully requested.

Claims 9-12 are dependent on claim 7 and are believed to be allowable for at least the reasons claim 7 is allowable. In addition, these claims recite additional features not disclosed or suggest by Nagata.

For example, claim 9 recites that the carrying out a loop back control test is performed in an ATM switching apparatus. Similar to the discussion above with respect to claim 3, Nagata does not disclose or suggest this feature.

For at least this additional reason, withdrawal of the rejection and allowance of claim 9 are respectfully requested.

Claim 13 recites a system comprising a plurality of testing devices, a plurality of path handlers, a plurality of channel handlers and a plurality of trunks. Similar to the discussion above with respect to claim 1, Nagata does not disclose or suggest these elements.

Claim 13 also recites that the system includes a control unit configured to issue an instruction to a first one of the plurality of testing devices, the instruction indicating that

the first testing device is to perform a loopback control test. Claim 13 further recites that the first testing device is configured to receive the instruction and send test data to at least one of the path handlers, channel handlers or trunks in response to the instruction. Since Nagata does not disclose or suggest the claimed path handlers, channel handlers and trunks, Nagata cannot further disclose or suggest sending the test data to at least one of the path handlers, channel handlers or trunks, as required by claim 13.

For at least these reasons, Nagata does not disclose or suggest each of the features of claim 13. Accordingly, withdrawal of the rejection and allowance of claim 13 are respectfully requested.

Claims 14-19 are dependent on claim 13 and are believed to be allowable for at least the reasons claim 13 is allowable. Accordingly, withdrawal of the rejection and allowance of claims 14-19 are respectfully requested.

Claims 2 and 8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagata. The rejection is respectfully traversed.

Claims 2 and 8 are dependent on claims 1 and 7, respectively, and are believed to be allowable for at least the reasons their respective independent claims are allowable. Accordingly, withdrawal of the rejection and allowance of claims 2 and 8 are respectfully requested.

NEW CLAIMS

New claim 20 has been added. Claim 20 is dependent on claim 13 and is believed to be allowable for at least the reasons claim 13 is allowable. In addition, claim 20 recites additional features not disclosed by the cited art. For example, claim 20 recites

that the plurality of path handlers, the plurality of channel handlers and the plurality of trunks are contained in a single switching apparatus. The cited art of record does not disclose or suggest this feature. Accordingly, allowance of claim 20 is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, the applicant respectfully requests withdrawal of the outstanding rejection and the timely allowance of this application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

HARRITY SNYDER, L.L.P.

By: /Glenn Snyder/
Glenn Snyder
Registration No. 41,428

Date: December 29, 2006

11350 Random Hills Road
Suite 600
Fairfax, Virginia 22030
(571) 432-0800

Customer Number: 44987